

**North American Numbering Council**  
**Meeting Minutes**  
April 21-22, 1999

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**I. Time, Date and Place of Meeting:** The North American Numbering Council held a meeting, commencing at 8:30 a.m. on Wednesday and Thursday, April 21-22, 1999, at the Federal Communications Commission, 445 12th Street, S.W., Washington, DC 20554.

**II. List of Attendees:**

A. Council Members

<u>Voting Members</u>	<u>Organization</u>
1. Beth Kistner	ALTS
2. Edmund Gould	AT&T Corp.
3. Dan Hochvert	Bell Atlantic
4. Ronald Binz	Competition Policy Institute
5. Robert McDowell	CompTel
6. Lori Messing	CTIA
7. Alan Hasselwander	Frontier
8. Norman Epstein	GTE
9. Peter Guggina	MCI WorldCom
10. Gerry Thompson	Mobility Canada
11. Vincent Majkowski/Bruce Armstrong	NARUC
12. Erin Duffy	NARUC
13. Amy Putnam	NARUC
14. Philip McClelland	NASUCA
15. Natalie Billingsley	NASUCA
16. Beth O Donnell	NCTA
17. Larry Krevor/Bob Edgerly	Nextel Communications, Inc.
18. Dan Gonzalez	NEXTLINK
19. Joe Kingrey	Nortel Networks
20. Carl Hansen	Omnipoint
21. Trent Boaldin	OPASTCO
22. Cathy Handley	PCIA
23. Bill Adair	SBC Communications, Inc.
24. Ron Havens	Sprint Corp
25. Lou Almeida	Stentor
26. Gerry Rosenblatt	TIA
27. Paul Hart	USTA

Special Members (non-voting):

Leo Mevel	CRTC
Ron Conners	NANPA

## B. Commission Employees

Kris Monteith, Designated Federal Officer (DFO)

Jared Carlson, Alternate DFO

Diane Griffin Harmon, Assistant Chief, Network Services Division (NSD)

Les Selzer, NSD, CCB

Gayle Teicher, NSD, CCB

Patrick Forster, NSD, CCB

Jeannie Grimes, NSD, CCB

Linda Simms, NSD, CCB

**III. Estimated Public Attendance:** Approximately 55 members of the public attended the meeting as observers.

**IV. Documents Introduced.** Each member received the following handouts:

- (1) LNPA Working Group Report  
Wireless Number Portability Subcommittee (WNPSC), Key Issues  
Wireless Status Report, Issue Matrix  
Draft Notice re: Wireless Portability
- (2) Issue Management Group - Recommendation for LNP Problem Identification & Management
- (3) NRO Working Group Report
- (4) NANPA Oversight Working Group Report
- (5) NANPA Evaluation Report
- (6) INC Report 500/900 Portability
- (7) Cost Recovery Working Group Report
- (8) NANPA Fund Performance
- (9) Lockheed Martin Number Utilization Forecast and Trends
- (10) LM NANPA letter of April 7, 1999, re: Audits
- (11) Erin Duffy, North Carolina PUC, Summary of State Commission Information on Consumer Preferences on Area Code Issues

## V. Summary of the Meeting:

*April 21, 1999*

**A. Welcoming Remarks.** Alan Hasselwander, Chairman of the Council, provided welcoming remarks and announced the following upcoming LNPA Working Group leadership changes: Marilyn Murdock, SBC, who has served on the LNPA Working Group since its inception and worked very hard behind the scenes, is retiring from SBC. Chairman Hasselwander expressed his thanks and those of the Council for all of Ms. Murdock's excellent work. Both Paula Jordan and Tom Sweeney have decided not to run for a second term as LNPA WG Co-Chairs.

**B. Local Number Portability Administration (LNPA) Working Group Report.** Co-Chairs Tom Sweeney, AT&T, and Paula Jordan, Airtouch, provided the report to the Council. Ms. Jordan reviewed the key wireless issues. Brian Egbert, Sprint PCS, was elected as Co-Chair of the WNPSC, and Jim Grasser, Ameritech Cellular, was elected as chair of the Inter-carrier

Testing Subgroup. Components of an Inter-carrier Test Plan have been outlined with an initial schedule for May, June, and July meetings. An alternative wireless LNP architecture, which does not require MIN/MDN separation, is being examined. The WNPSC reconfirmed, absent any new developments, that the earliest date for CMRS participation in thousand-block pooling is November 24, 2002, which is the wireless LNP implementation deadline.

It was agreed that standards are needed for a wireless Inter-carrier Communication Process and development of these standards was referred to a CTIA Technical Team. A schedule for the Team's evaluation was established which would not delay the November 24, 2002 implementation date. The WNPSC also discussed implementation impacts associated with the Reseller Option and identified an alternative that may allow resellers to port numbers by using the service providers network rather than going directly to the NPAC.

Chairman Hasselwander questioned the nature of the wireless architecture that may allow earlier participation of wireless carriers in number pooling. Ms. Jordan explained there may be an optional method that would enable wireless carriers to participate in pooling without having to separate the MIN/MDN, which is necessary for wireless LNP to support nationwide roaming. This optional method, however, includes a number of conditions, such as only one wireless carrier in the NXX, for it to work. The WNPSC plans to report by June 1999 on this optional method which could affect when wireless carriers participate in pooling.

Beth O'Donnell, NCTA, asked when the optional method could be available. Ms. Jordan replied that because, among other things, the method still requires that wireless carriers be LNP capable (and not rely on the services of third parties) and it would be a considerable period of time before some wireless carriers become LRN/LNP capable, establishing a date certain is difficult. While it initially appears the optional method may not require participation in pooling by all wireless carriers at the outset, this could change as more study of this option is completed.

Vince Majkowski, NARUC, questioned why a separate wireless data base was needed for wireless LNP, while wireline and wireless together use a common data base in the 911 context. Ms. Jordan clarified where only one wireless carrier is identified with the NPA-NXX, separation of the MIN/MDN would not be necessary. In addition, wireless carriers would use the same pooling database that wireline carriers use.

Ms. Jordan reviewed the action items contained in the WNPSC Report from the May 10, 1999 WNPSC meeting, and asked for volunteers to fill the WNPSC Co-Chair position.

In response to Carl Hansen's, Omnipoint, question concerning a wireless carrier's monthly growth and the allocation of additional NXX codes, Ms. Jordan affirmed that a wireless carrier could be required to donate to the pool numbering resources not immediately used when allocated an NXX. This may require the wireless carrier to later obtain additional NXXs, if needed. Paul Hart questioned what would happen to the relationship between an NXX and a wireline rate center for an NXX allocated to a wireless carrier. Ms. Jordan replied that because wireless carriers typically designate an NXX for a particular wireline rate center, the wireline carrier could obtain numbers in that rate center that have been donated to the pool.

Ms. Jordan noted the changes made in the WNPSC Status Report Matrix -- there were changes

made to the meeting schedule at item 1H, agreements reached on T1S1.6 standards items 3H and MBI Administration at 6L, and Wireless Carriers participation in WNP at item 7H. CTIA, OPASTCO, PCIA and USTA have agreed to send notices to their respective memberships to encourage participation in WNP. Ms. Jordan clarified that the OSS identified in the matrix are for wireless only OSSs; and at this time there are no interfaces between the RBOC systems and the wireless OSSs.

Tom Sweeney presented the remainder of the LNPA WG Status Report. Mr. Sweeney reported that during the Y2K Quiet Period, from November 1, 1999 to March 1, 2000, the industry will address only production impact problems or Y2K problems. Gerry Thompson, Mobility Canada, stated that the September 9, 1999 date is also a set aside for some carriers. Mr. Sweeney stated the LNPA WG did not include this date in the discussion, but would review the question of that specific date.

The Wireline/Wireless Integration Report remains on schedule for delivery in June 1999. Because additional test cases for the next NPAC/SMS release (Release 2.0) were added, the testing interval for this release was extended a few weeks.

A statement of work for Release 3.0, National Number Pooling has been delayed and delivery is now expected by May 7, 1999. Test case development is on hold until May 7, 1999 due to industry and vendor resource constraints. Regarding the NPAC release management cycle, the WG determined that the optimal number of software releases is one set of requirements per year delivered in two parts (A&B).

The quantity restriction of telephone numbers for download has been lifted. The NPAC is examining the slow horse issue in conjunction with the WG. Compensation for this additional reporting will be accommodated without going through the SOW process. Ed Gould confirmed that there are mechanisms in the LLC contracts for such work without going through the SOW process. There will be a complete analysis of the slow horse issue by the July 1999 NANC meeting; the WG expects to complete its work by July 1, 1999.

Nominations for new co-chairs will be voted on at the May 10-13, 1999 WG meeting in Baltimore, and presented to the full Council at the May NANC meeting.

**C. Issue Management Group (IMG) Report on LNP Implementation Difficulties.** Dan Gonzalez and Brad Baxter, Nextlink, provided the report to the Council and thanked Beth Kistner and Dan Hochvert for their leadership on this issue.

Mr. Gonzalez addressed the recommendation for LNP problem identification and management of implementation difficulties. Because regional LNP forums do not always have a national perspective, the LNPA WG should have overall oversight responsibility to identify problems, and should use existing resources and advisory letters to communicate recommended resolutions of LNP implementation problems, or new LNP processes/requirements, etc.

Brad Baxter added that there are some emerging regional forums, and a few issues are being addressed universally. The OPI forum is addressing selected issues in some regions, but for carriers in multiple regions this could be a real problem. Peter Guggina observed that the LNPA

WG already has this responsibility, and agreed that NIIF should not be circumvented. Currently, there is not one central place for a carrier to look at all the issues, and many smaller carriers cannot attend all regional meetings. This proposal is not forum shopping, but a way to bring focus to LNP issues. There was a motion to accept the proposal. Beth Kistner added that this is problem identification and an opportunity to get a full range view of all the problems and monitor the issues. Chairman Hasselwander stated that NANC has an oversight responsibility and obligation to fulfill under the *Second Report and Order*. There was Council support for the proposal.

Ed Gould added that prioritization and identification of who will resolve the issues should be included, and that issues should be categorized and liaisons recommended to other forums as needed. LNPA architecture is a LNPA WG responsibility. With regard to lack of carrier cooperation and dispute resolution, the process is not being followed. Chairman Hasselwander stated that under the dispute resolution process in the *Second Report and Order*, parties are to bring disputes to the NANC, but have the right to go directly to the FCC.

Dan Hochvert noted that consensus did not come easily on this issue, but a central focus is needed to understand the scope of problem areas and difficulties. The LNPA WG could determine whether there are guidelines to address a particular matter, or turn to NIIF if it is a matter of method and procedures. Centralized tracking is a very important oversight role, and the WG should report where the items are being worked and the status of each action item.

LLC Project managers (PM) and the NPAC work together if a problem is NPAC-related, but many of these issues do not fall into that category. The LNPA WG discusses proposals (and cost implications) with the PM. SOWs are developed and approved individually by each LLC, but they all work together. They work with the LNPA WG for modifications in LLC Operating procedures, and the processes are unified before going out to all seven LLCs.

Chairman Hasselwander stated that LNP guidelines are the purview of the LNPA WG under the NANC pursuant to the *Second Report and Order*. This process recommendation is consistent with that Order. Consensus was reached on the IMG recommendation, with one opposition.

Tom Sweeney agreed that overall responsibility rests with the LNPA WG, and raised the following concerns: increase in work load; concerns about the mechanics for hand off of the issue; and authority to modify guidelines. Dan Hochvert added that authority flows from the FCC to NANC to the WG. Kris Monteith confirmed that the NANC does have such oversight responsibility, however, the NANC's recommendations do not have binding authority on the Commission. Moreover, Ms. Monteith recognized that the industry as well as the Commission has preferred that issues be resolved through the use of voluntary guidelines. Chairman Hasselwander added that most of the issues are a matter of lack of carrier cooperation and the establishment of deadlines. Dan Hochvert noted the IMG did not discuss in detail the matter of issues between two carriers.

Beth Kistner suggested that the WG should make regular reports to NANC with issues and dates for their resolution identified. Chairman Hasselwander directed the LNPA WG to report back at the next meeting on steps taken to fulfill the recommendation, and thanked Dan Gonzalez and the IMG for doing a very fine job cutting through a contentious issue.

**D. Numbering Resource Optimization (NRO) Working Group Report.** Co-Chair Mike Whaley provided the report to the Council on reserved numbers, and an update on their review of the three COCUS replacement models.

*Characteristics of a reserved number* -- Description was restated as follows: A reserved number is a non-working number; has been set aside by a service provider at the request of a specific end user customer for that customer's future use; the reserve status of a telephone number (TN) is reflected in the TN administration system of the service provider in whose inventory the numbers are being reserved; the name of party requesting the reservation is in the service provider's administration system; the end user is aware of the reservation of numbers; the reserved number has some restrictions such as duration and quantity; and a number reserved by a service provider on behalf of a customer may be a ported number where number portability is available and where any portion of the associated working numbers have been or will be ported from that service provider.

*Reserved number guidelines* -- Must ensure that number reservations are not used or purposes of hoarding; must apply to all classes of customers; must apply equally to all service providers making reservations on behalf of their end-user customers; must apply equally to service providers that make use of numbers for their end user customers from another service provider's inventory (e.g., resellers, Type 1 interconnection for CMRS carriers); reserve number intervals begin for all customers regardless of any previous reservations with the effective date of this proposed process, and the original interval limitation established for given customers shall continue uninterrupted if or when the customer changes service providers.

*Consensus agreements reached regarding reserve numbers* -- The length of the initial period is limited to 12 months maximum; extensions are limited to a maximum of 6 months; the extension of a reserved number is defined as follows: if the customer subsequently places additional lines in service, the customer would be permitted to establish an associated reservation subject to the prevailing guidelines. The NRO will not establish reservation proposals based on the type of customer; the limitation on the quantity of numbers that can be reserved applies to the customer; a customer is an end user, and restrictions on quantity and intervals should be based on per customer per NPA NXX as the location parameter.

Example: If a customer has activated 100 lines, with 50 on reserve, the extension period does not change. Subsequently, if the customer places additional lines in service, the customer is then entitled to get more reserved numbers; however, additional numbers activated would be drawn from customer's reserved lot. Proposed guidelines would tie quantity limit to number of lines in service. Also, ported numbers are subject to the original 18 month reservation period (i.e., the reservation is tied to the customer).

Paul Hart asked how to prevent abuse of this process. Beth O'Donnell stated that numbers are out of circulation for 18 months and therefore, unavailable for other customers. It is difficult to write guidelines that will facilitate this process. Philip McClelland, NASUCA, asked how much influence or impact reserved numbers have in creating jeopardy situations. Dan Hochvert responded that there is a logical percentage (approximately 10%) of TNs that are reserved, or held out of service, that are not serving customers, and added that there is a need for serious

guidelines. This report goes along way to move the industry in that direction. However, Chairman Hasselwander added that there needs to be a level of specificity. Norm Epstein questioned whether this process would apply to all numbers or specific types of TNs. It should be clearly stated whether the reserve principles apply to XXX, ZZZ, 555 or CICs; more specificity will be required for incorporation into the INC guidelines.

COCUS Models Review. The WG received the LINUS model last May; since then two other contributions from U S West and AT&T have been received for evaluation. The WG has prepared a proposed draft letter to NANPA seeking costs of the different models. The Bureau's deadline of June 30, 1999 will be difficult to meet. There will be a NRO conference call meeting to determine how to make the deadline. Dan Hochvert added that the modeling has been done; now we are asking a supplier for the costs for each model, and asked how is that possible without established requirements?

Chairman Hasselwander emphasized that there is a great need for a new COCUS. Kris Monteith added that the Commission would greatly appreciate a recommendation from NANC for an effective COCUS utilization model, and that recommendation should be as detailed as possible, recognizing NANC's time limitations and that some additional work may need to be completed following submittal of the NANC recommendation. With regard to cost measurement, the existing COCUS is the base by which the other models should be measured. The NRO has requested a response from LM by May 21, 1999.

The WG has asked service providers to come back with their order of magnitude of costs; not necessarily specific dollar costs, but costs relative to each other. They should try to make some logical conclusions about what are the most important parts of the model to help us decide which one to recommend. The mailing list for NRO is quite large and the information distribution is fairly broad -- the request was sent out in January so the service providers and the community at large has had an opportunity to look at the models for about four months.

Vince Majkowski clarified that the NRO task was to evaluate LINUS and, as a result, there are now three different proposals to consider. Mr. Whaley agreed they were to evaluate the existing COCUS and asked for contributions as to other options, then determine what might be the best model for the industry to follow. With regard to future bidding, NANC had earlier determined that it may be necessary to bid the new model or modify the existing NANPA fixed price agreement for the additional costs.

Norm Epstein suggested that the WG needs to obtain the cost information from NANPA, and select certain aspects of each of the different models, which are dramatically different from one another. Then there needs to be a recommendation as to what a new COCUS should contain and a plan on how to implement it. Besides looking at the mechanics in which to proceed, the costs need to be factored into it. In order to come back with a report and recommendation with sufficient detail, the NRO will need to meet much more than what is currently scheduled. It was further suggested that the WG should obtain feed back from NANPA on the relative costs earlier than May 21; and obtain a definite commitment of the part of NANC that there will be no conflicting meetings with NRO meetings in an effort to meet the June 30 deadline.

Chairman Hasselwander stated that NANC will make a commitment to the NRO that the COCUS

project will take precedence over other work.

With regard to the use of 1K pooling costs as a baseline, Norm Epstein stated that within the 1K NP administration guidelines are details on how to do a survey and get utilization data. Using the present COCUS as the baseline, the three contributions and possibly the 1K NP model can be compared on their merits and cost. Chairman Hasselwander stated that all three models have been around for awhile, and that there should be growing consensus on what the end product should contain. Paul Hart added that in the past vagueness was part of the INC guidelines; but now we need clear speak in order to provide proper guidance to NANPA.

Chairman Hasselwander summarized the COCUS NRO issue referring to the April 15, 1999 letter from Yog Varma, Deputy Chief, Common Carrier Bureau, which directs NANC to provide a final report on a revised data collection and reporting model by June 30, 1999. As a reminder to the Council, the Chairman added that NANC made a number of policy decisions months ago with regard to sanctions, rules for compliance and confidentiality. Therefore, the way is clear to recommend a new tool (revised COCUS) with sufficient information to administer the NANP in an efficient way.

Vince Majkowski motioned to delay the reserved number question, adding that it was NARUC's position that the revised COCUS should be a high priority. By the May NANC meeting, NRO would be selecting the best of the three solutions in an effort to move forward. NANC has already dealt with the enforcement, audits and confidentiality issues. NANC will meet on June 22-23, and the report is due to the FCC by June 30<sup>th</sup>.

Chairman Hasselwander stated that the NRO recommendation for a replacement model should set forth how long it will take to implement the 2000 COCUS, and explain the model, its value and how it will get the job done. Questions to be answered include: What are the elements in the model? What are the parts of the model? What data should be collected and how frequently? Dan Hochvert added that NANC should review the options, and that an ongoing review process is absolutely necessary to build the kind of consensus needed and to avoid a hurried last minute recommendation. Vince Majkowski recommended that the NRO provide at the May meeting their best choice; if not agreed to, then NANC should provide guidance and additional direction.

It was agreed that the NRO WG will devote its full attention to COCUS between now and the June meeting. At the May meeting, an update report will contain enough information regarding the alternatives, and, if there is a 4th model, include it as well. All NANC members will receive electronic copies of the three models to review, and they will also be posted to the Chair's web site. The NRO letter to NANPA will be modified to ask for the base cost for the existing COCUS requirement, without changing anything else. Chairman Hasselwander stated that a memorandum outlining the work plan expectations will be sent to the NRO Co-Chairs, and that any policy issues should be addressed at the May NANC meeting. The NRO Co-chairs are to coordinate meeting dates ASAP to avoid conflicts with other working groups.

NANC approved the NRO's request for reconfirmation of its current leadership.

**E. NANPA Oversight Working Group Report.** Co-Chairs Andrea Cooper and Pat Caldwell provided the NANPA Performance Evaluation Report to the Council. A participation list of

Working Group members is located in the appendix; additionally, the NANPA participated in much of the process, with the exception of the last two meetings. Ms. Cooper encouraged the Council to read the entire report, which is 32 pages with appendices. The quantitative analysis is not in the handout, but contained in the report. The evaluation covers the February 1998 through February 1999 period and is a qualitative assessment of NANPA's performance. The WG's methods and procedures are explained on page 3 of the report.

*Input analyzed:* The report is based in part on input from NANPA's response to the compliance matrix, and NANPA's first annual report. The performance feedback survey responses came from 18 state commissions and 52 service providers from several segments of the industry. The WG was pleased with responses from the industry; several companies completed surveys from different markets. The WG also conducted site visits to Concord, California, and had a face to face meeting with several NPA relief planners in Dallas at the end of March.

*Analysis.* Gary Mills, SBC, was the editor and provided quantitative analysis on much of the report. State and industry comments about NANPA were segregated. Uniform criteria were applied for assessment of the comments. Linda Hyman, Texas PUC, performed the first cut on the analysis; all survey written comments were recorded verbatim and are included in the appendix.

The WG stressed that it is important to recognize that this is a consensus report. Recommendations fall into five categories. (1) Annual report: provide revised annual report within 60 days; (2) missing financial report; (3) NPA status (4.2.1. and 9.6.2) with maps; (4) a list of industry assets and IP subject to transfer to successor NANPA; and (5) activities associated with all NANP member countries (lack of discussion about the other countries in this section of the annual report). The WG requested detailed information to support information summarized in the NANP annual report, and a commitment regarding new utilization and forecasting models. The WG also recommended that NANPA correct the issues presented in the report. Chairman Hasselwander stated that this is a very intelligent plan put forth by the WG. The WG received numerous compliments from Council members on the report.

The WG will monitor corrective actions and will report back to Council. Ron Conners, NANPA, relayed assurances from Jeff Ganek that LM will work to change rating from acceptable to excellent and that more new hires are on the horizon. LM is grateful to the WG for this very thorough report, and it is a great help to NANPA in evaluating its service. LM has made a commitment of May 12th for a first cut response on some issues to the WG.

Bob Edgerly, Nextel, questioned whether the addition of CO Code Administration to the NANPA function was an improvement from the past. The opinion was expressed that the centralization of the functions is an improvement.

The NANC approved the next steps and unanimously approved the report as written. Chairman Hasselwander will send a letter to both NANPA and the FCC forwarding the WG's report as written. Kris Monteith expressed her thanks to the WG for submitting such an excellent report.

**F. Industry Numbering Committee (INC) Report.** INC Moderator, Richard Round, GTE, presented the INC Report. Mr. Round announced that John Manning, ATIS director for the INC,

has been hired by Lockheed Martin CIS, and thanked John for all the valuable contributions he has made over the years at ATIS.

Mr. Round reviewed the number pooling status; number status terms; INC 500/900 Number Portability Status and the NANC action item response. A summary of pooling agreements reached at the March 29, 1999 meeting are shown on page three of the written Report. The issues listed on this page should reach final closure by the September 1999 INC meeting. It was noted that all but three of the new pooling issues, contained on page four of the Report dealt with thousands-block pooling. Issue 164, Individual Telephone Number (ITN) Pooling Administrative Guidelines, is listed now in an effort to help the INC track future work on ITN pooling. Issue 171 concerns the work plan for completion of thousands-block number pooling. Issue 177 concerns Unassigned Number Porting; no plans have yet been developed to handle this issue.

The issue statement and status for Issue 134, Common Number Status Terms, was also included in the INC Report. INC information is available via the ATIS website at <<http://www.atis.org>>. Modifications to some definitions have been made, and this issue is currently in initial closure, with final closure expected by April 26, 1999. Also, some of the definition modifications were reflected in Sections 3.1 and 6.2.2(a) of the INC Thousand Block Pooling Guidelines. A definition for "reserved number" will ultimately be provided by the NANC.

Mr. Round reviewed the contributions contained in the INC Report and received in the April 14-15, 1999 500/900 Portability Workshop Meeting. The Executive Summary baseline text was revised, and an initial response on the use of the existing SMS/800 toll free architecture was received. However, no time frame for a formal response has been established. In addition, two new technically feasible portability architectures were received and will be discussed at the upcoming (April 29-30, 1999) NIIF NIA Committee meeting.

Discussion ensued regarding the INC 500/900 Workshop's request for guidance regarding on pooling and 500/900 resources. Norman Epstein reiterated that guidance was needed as to what type of portability architecture should be adopted for 500/900 pooling, and that there is no directive for the type of portability to be used. A different architecture may affect the outcome. Chairman Hasselwander interjected that efficient number utilization and equity among the carriers is a policy issue that should be discussed by NANC.

Peter Guggina reviewed some of the history of 800 toll free portability -- any user, any carrier had access to any number, if not reserved. The concept at that time was a total pooling environment. 500 and 900 are Service Access Codes (SAC) codes; therefore, the concept of pooling should not be an issue here. If a portability environment is implemented, SAC codes should be made available to anyone who needs them. If someone has a working number, then they should be able to change carriers, and not have to rely solely on the incumbent carrier. Architectures for 500/900 portability should be addressed in a total pooling environment.

Ed Gould noted that care should be taken with use of the SAC codes to be careful of what the business use is -- an expensive type of an arrangement should not be implemented if there is no need for it. Dan Hochvert concurred with this idea, noting the cost of running the 800 SMS system. Are there enough uses for 500 and 900 numbers today to devote scarce resources to this issue? General concerns were raised concerning a need to understand the options and not spend a

lot of money that will not necessarily yield any gain for service providers or customers. Paul Hart added that with the problems the industry is currently confronting, this issue is not worth tackling at this time.

Beth Kistner noted that there is a question of whether or not there should be 500/900 portability at all. If portability is chosen, however, it should be done "right." Mr. Epstein noted that the discussion seemed to favor concentrating on the individual telephone number (ITN) approach, similar to the 800 data base concept, and suggested that it would be best not to look at 10k or 1k architecture when establishing 500/900 portability. Chairman Hasselwander disagreed with this assumption and discussion continued. Carl Hansen questioned whether or not all the 500 and 900 NXXs are assigned. Mr. Epstein answered that hardly any 500 and 900 NXXs are assigned. Mr. Hansen noted that 500 and 900 pooling and porting at the thousands block level are being examined on a regional basis, but that the INC should consider that 500/900 services are nationwide.

Paul Hart felt that the architectural issues should be resolved, and, if 500/900 portability/pooling is done, that the toll free model should be used. Given the steps necessary, however, it is not clear whether it is something that is worth pursuing. Chairman Hasselwander interjected that the FCC directive was to determine if 500/900 portability is done, how soon can it be accomplished. Ron Binz noted that it seems foolish to use 10k and 1k pooling for porting these SAC codes. It may be wise to investigate the ITN solution which mirrors the toll free model. Thousands block pooling for a SAC code is the least acceptable solution. INC needs to tell us what it is going to take. Mr. Round noted that the directive from the FCC was to look at 500/900 portability, not pooling, and reiterated that portability and pooling are different.

Philip McClelland agreed that ITN 500/900 pooling is probably the right approach, but that this is not the most important issue at this time. Ron Binz summarized that it appeared the best idea was for 500/900 portability is to mimic 800 toll free service. Vince Majkowski concurred, suggesting that this issue be tabled for six months, and readdressed later if there is further interest. A preliminary letter to the FCC addressing and clearing this issue will be drafted. There were a few closing comments suggesting that the 800/SMS architecture was not necessarily readily transferrable to 500/900 portability. In summary it was agreed that the NANC should suggest to the FCC that the issue of 500/900 portability is not of sufficient import at this time to devote effort to dealing with the question. Peter Guggina, Paul Hart, and Dan Hochvert will prepare a statement which will be circulated to the NANC members before the May meeting.

*April 22, 1999*

**G. Meeting Minutes Approval.** The meeting minutes of March 16-17, 1999 and the minutes for the conference call meeting of March 30, 1999 were approved with minor typographical corrections.

**H. Cost Recovery Working Group Report.** Co-Chair Anne La Lena provided the report to the Council. A draft letter in response to the Illinois Number Pooling Subcommittee, Illinois Commerce Commission letter of March 2, 1999, was presented to the Council. The response letter serves as a clarification of the August 27, 1998 CRWG recommendation regarding cost allocation for 1,000 block number administration and pooling. The following questions were raised in the Illinois letter, and answers thereto were read into the record:

*What type of costs would be included? Administration only, LNP transactions? NPAC Pooling Releases?* The recommendation stated that costs by the NANPA for 1,000 block administration and pooling should be recovered by the existing NANP cost formula. Several types of costs, such as NPAC development, NPAC transactions and NANP functions were cited as costs to be expected for 1,000 block administration and pooling, with the presumption that these costs would be recovered via the NANP formula. An exhaustive list of possible costs was not identified.

*Are these costs to be treated as NANPA costs, to be collected via the NBANC billing and collection process?* The recommendation was to have the costs be recovered via the NANPA cost allocation formula and billed and collected by NBANC. It was also recommended that annual billings take place rather than through mid-cycle adjustments. NBANC's annual billing cycle begins in February, and the appropriate dollar amount to be collected would need to be identified by November 1 of the prior year and shared with NBANC in order to be calculated in annual collections.

*What is the current status of the recommendation? If approved by NANC, what remains to be done and how soon could it be implemented?* The CRWG's 1,000 block administration and pooling recommendation is before the NANC. As the NANC is an advisory body to the FCC, it is expected that the FCC would need to act on the recommendation.

Ms. La Lena explained that all carriers would be subject to costs when the NPAC is used for pooling activities and as such would come under the NANPA B&C recovery method. Nelson Ledbetter, Ameritech, asked about the short term questions in Illinois, and indicated that he hoped these issues would be dealt with in a way that is consistent with the national standard. Ron Binz noted the importance of getting a handle on both costs and cost recovery. Chairman Hasselwander added that the Steering Group will continue to discuss costs to understand their format. It is appropriate for the IMG as it works this issue to get into the costs, and the nature of such costs; we need more information on the structure of what those costs are. Ms. La Lena pointed out that the August 27 letter recommendation was a snap shot at the moment, and does not bind the CRWG or the Council in any way. Paul Hart noted that NANC needs as much clarity as possible on this issue and be able to separate the NPAC porting and pooling functions.

In response to a question regarding why ITN and UNP are listed as pending items for the CRWG,

Ms. La Lena indicated these issues are on the back burner and are simply listed as place holders, since there is no direction from NANC to work these issues at this time.

NBANC Report. Vincent Majkowski, Chairman, NBANC, provided the report to the Council. The financials as of April 10, 1999 were read into the record. The current fund balance is \$2.16 million; projected receivables are \$2.33 million/per month; this includes Canada at \$116K and the Caribbean countries at \$24K. Payment to LM to date is \$357,000, with future payments due at \$3.923 million. Payments to NECA (B&C Agent) to date are \$26,000, with future payments remaining of \$231,000. Board expenses to date \$4,569, with a remaining \$231,000. Projected payments to an external auditor for both year 1 and year 2 are \$22,000.

Outstanding 1998 contributions - Dominican Republic amount due is \$17,880. Collection efforts are ongoing. NBANC is working with Alfred Ayog of Cable and Wireless, who coordinated 15 Caribbean payments in 1998, to collect the 1999 contributions.

Due to duplicate revenue information filed, a carrier was doubled billed for its 1999 contribution. The corrected billing reduced the anticipated receivables for the 1999 funding year to \$4.07 million. As of April 2, 1999, 3,294 FCC 496 forms have been received and entered into the data base. Gross revenues reported total \$231 billion with a net revenue of \$187.8 billion.

**I. Lockheed Martin (LM) NANPA Exhaust Study.** Chairman Hasselwander introduced the agenda item with a brief history of the first exhaust study presented at the February NANC meeting, and NANC's decision to form an industry team to work cooperatively with LM to arrive at a level of comfort regarding the assumptions and sensitivities of the exhaust model, and to pinpoint to the extent possible a date range for NANP exhaust.

Larry Vagnoni, Mark Foster and Tom McGarry presented the revised study to the Council. The revised study was based on a NANC request to use the February 18<sup>th</sup> model as a basis for understanding the probable period in which the NANP may exhaust, as well as the probable effect of thousands block pooling on that period. To accomplish this, Larry reported there were eight days of meetings to work through the tools, and modeling. Lockheed Martin CIS expressed its thanks to all the NANC, FCC and other industry participants who assisted in the effort. Ed Gould, AT&T, stated that industry had not approved everything in the documents.

Tom McGarry reviewed the three models used in the Exhaust Study: NPA (top down), CO Code Demand (bottom-up), and Pooling.

NPA Demand Model. This model uses recent historical NPA demand (1991-1998), and 1999 and 2000 estimated demand to project the demand for NPAs in 2001 and beyond. Of the 800 total available NPAs, 120 are reserved and unassignable, so there are 680 usable NPAs, 259 of which have been assigned; with a remaining 410 available geographic NPAs at year end 1998 (including easily recognizable codes - ERC). The likely range of growth rate for 2001 and beyond is estimated at 7% to 15%, and assumes two NPAs for international use and/or service codes. NANP exhaust dates based on three growth scenarios were given. At an accelerated growth rate, exhaust would occur in year 2006; moderate - year 2007; and decreasing growth projects exhaust in year 2012. NANPA concluded that there is a high probability that the NANP will exhaust before 2012 or as early as 2006. NANPA believes the high NPA demand rate between 1995 and

1998 and expected for 1999 and 2000 will continue into the foreseeable future. The Review Team did not agree to this exhaust window, but did agree that projecting NPA demand depends upon whether recent NPA demand is an aberration of limited duration or whether it represents a trend that may continue.

CO Code Model. This model contains two modules - the CO code demand module, which estimates total yearly CO code demand and is then input into the NANP exhaust module to estimate yearly NPA demand and subsequent NANP exhaust. A sensitivity analysis projects with an 80% confidence that exhaust will occur between 2005 and 2012. The Review Team concentrated its effort on this model. Current growth rate was taken into account; the model projects 14,000 CO codes will be assigned in 1999.

Bill Adair stated that although there was not unanimity among the group, there was strong consensus. Carl Hansen agreed, but added that some of the assumptions were not agreed upon; *e.g.*, CTIA presented 4 studies that showed CMRS growth rates contradicting the assumption used (these growth rates were lower than the DLJ study; and there was not agreement on which should be used).

Pooling Model. This model applies some alternate assumptions to the output of the CO Code Demand Module to determine a new yearly CO code demand. The new CO code demand is then applied to the NANP Exhaust Module to estimate yearly NPA demand and subsequently, NANP exhaust. There are three scenarios described in the handout at page 22. The donation rate or reclamation works out to be approximately 50% of the non-working TNs. The life of the NANP increases by 46 years when one industry segment participates. Pooling benefits increase as the level of participation increases. The Review Team did not agree that the effect of pooling would be to extend the life of the NANPA into mid-century.

Carl Hansen explained that the 2094 exhaust was the estimate if everyone participates in pooling. Paul Hart asked how much of this was taken from experiences with the pooling trial in the 847 NPA; Tom McGarry responded that no data from the Illinois pooling trial was used. Chairman Hasselwander stated that the Illinois trial results should be looked at for consistency with these results. Nelson Ledbetter added that non-pooling conservation measures were also included in the Illinois trial, resulting in a reduction of code requests and a return of codes. Thus, the effects of pooling vs. other conservation measures should be examined. Bill Adair noted that the amount of time spent over the 8 days on the pooling model was small in comparison to the other models.

Carl Hansen discussed what we could expect if pooling is implemented; where competition has already evolved and carriers have enough NXXs, pooling may have little impact. Beth O'Donnell disagreed, stating that pooling may still have an impact where carriers need to expand their footprint. The effect of wireless participation in 2003 and the 1999 COCUS need to be examined to further refine the effect of pooling on the life of the NANP. Bill Adair stated that the report is not complete, and they need to look at exhaust estimates, rate centers, number of CLECs and other key variables that may change the exhaust date, adding that the 2016 exhaust date was a compromise.

Philip McClelland complimented and thanked NANPA for the study, and stated that it would be useful to run other variables, such as the effect of the CMRS pooling implementation delay and

the different impact of rural CLEC entrants; he also asked if there were projections on the cost of expanding the NANP. Chairman Hasselwander stated that there is no clear or hard data; the estimated time is 10 to 15 years, and the costs are high. Dan Hochvert stated there is a need to look at the drivers for NXX consumption, and to look at the current rate of assignment to see if the percentages are shifting. Most recent and current data should be looked at to make the assumptions as accurate as possible. Lori Messing added that data and predictions will never be perfect, and if NANPA does not reflect industry concerns about the cornerstone assumptions, NANC should. Ed Gould stated that a lot of positives came out of the report -- we should be concerned, but not panicked. Pooling will counter the effects; but, if we do nothing there will be problems.

Trent Boaldin stated that he would like to see the effect of exempting rural carriers from pooling, and consider other conservation measures. Vince Majkowski complemented NANPA, and stated that the Team had the proper focus and recommended that minority positions on the report should be documented and filed.

Ron Binz stated that the report is useful as a wake-up call that we need conservation measures. Thousands block pooling has differential effects, and we need to know what they are. Paul Hart stated that the report must be properly represented, and that we must determine whether the industry has enough time for expansion planning. Pooling is one tool, but there are other tools to expand the life of the NANP; NANC must continue to test conclusions and assumptions and craft a plan to apply the knowledge along with the FCC to extend the life NANP and determine what is the best way to go about it. Philip McClelland agreed, adding that keeping track of growth is difficult. The CLEC community is getting bigger, and there are new players -- it is important to keep track of this growth.

Chairman Hasselwander noted that the NPRM is coming, and the Council should ask NANPA to provide frequent updates on code assignments. The focus should not be on the study, but on where we go from here. The FCC has the January LM exhaust report on the record, and the new exhaust report will be forwarded to the FCC for information only and without further comment. NANC should focus on number optimization, and on how it can be most helpful. NANPA should continue to review and refine the exhaust report, and the Review Team will expand and finalize its executive summary.

Vince Majkowski supported sending the report to the FCC as a NANPA report with a separate statement by the Review Team, and suggested other parties should file separate statements or comments. Chairman Hasselwander stated that NANC should come back to the question of future collaboration going forward. There were no objections to forwarding the exhaust report to the FCC, with a revised Review Team summary once finalized. NANPA was requested to make periodic reports to update us on what is happening in the real world concerning CO code assignment and NPA relief planning.

**J. Steering Group (SG) Report.** Peter Guggina reported on the Issue Management Group (IMG) 1K Number Pooling matter. The SG empowered the IMG to continue more negotiations with LM, rather than wait until issuance of the NPRM. It was noted that NANC may need to refine the NP administration requirements, believing we built more into the requirements than perhaps is necessary. If so, this may result in additional activity to address adjustments to the INC

guidelines and requirements for number pooling. Chairman Hasselwander will send a letter to the seven LLCs to seek their assistance and coordination. A copy of the letter will also be sent to the Canadian Consortium.

Vince Majkowski, SG Co-Chair, reported on the procedural question raised in February, regarding the *ex parte* on the LM NANP exhaust report to the FCC, by the Chairman of NANC, in a capacity other than his NANC role. The question of the process resulted in the following points of discussion: The Council is the appropriate open forum before carrying issues forward to the FCC, and views expressed by parties where consultation with the full Council is not possible are views of the individual and not the full Council. However, it is recognized that there may be times when it is necessary to go outside this process. Chairman Hasselwander was not speaking on behalf of the Council, and felt it was an important issue to take to the FCC. This issue was finalized at the SG.

The results of the March 23, 1999 SG conference call were reviewed. Draft minutes of the conference call were circulated electronically prior to this meeting. The call addressed meeting conflicts between working groups. As a result, Beth O Donnell will coordinate meetings when it is needed and will develop a master calendar and list of contacts for coordination purposes. NANC agreed that it will attempt not to create new groups. With respect to priorities, Chairman Hasselwander stated that as significant issues arise, NANC will act as needed. Ron Binz added that Working Groups need to tell NANC what their priorities are and insist on getting NANC s up or down on the priorities.

**K. Other Business.** Erin Duffy, NARUC, in response to a March agenda item, sent a query via NARUC to all state commissions and received responses from four state commission. California conducted a formal survey in 1996; other commissions provided anecdotal information concerning consumer preference issues. It was suggested that Council members read the information summary -- it may be of value on a later agenda to inform our debates. Problem with lack of information on consumer preferences could vary by location. Surveys are useful, but not all states have the resources to conduct them.

NANPA Audit letter. Regarding Lockheed Martin NANPA April 7, 1999 letter to Chairman Hasselwander concerning an increase in cost to the fixed price bid for the audits specified in the revised April 1999 CO Code Guidelines. Chairman Hasselwander will personally contact LM, at the highest level, and discuss the audit issue.

State Petitions. Paul Hart raised an issue of concern regarding the numerous state petitions for additional authority filed with the FCC, and asked what we could do as an industry regarding COCUS (who does it and whether or not it is done); reclamation of codes (proceeds resulted in the return of the numbering resource -- how does it color the result of pooling out there); generic issues (what could we do to recommend to the FCC, industry and NANC that could help the state jurisdictions address and help the situation?); and reclamation of CO codes from the unqualified and unused codes (NANPA has the authority to demand their return). NANC might want to suggest to the industry how to fix this problem. There was support for this idea and it was noted that there are efforts underway at INC to tighten the guidelines. Chairman Hasselwander asked for submission of a written contribution with specificity for discussion at the next Steering Group meeting.

Number Portability N-1 Functionality. Peter Guggina advised the Council that T1S1 has an issue before it to change the N-1 functionality to change number portability. LNP order mentions N-1. It was agreed that this is a policy issue involving a NANC recommendation and FCC Order. Mr. Guggina will investigate and report to NANC at the May meeting.

*Next Meeting:* May 25-26, 1999, FCC Public Meeting Room.

#### ***V. Action Items & Decisions Reached.***

1. LNPA Working Group Report. The Wireless Portability Subcommittee will report in June concerning evaluation of an alternative method of number pooling. The report will include a description of what the option is, under what circumstances it should be used, and a time frame for implementation.

A draft letter was accepted, which calls for broader and increased participation in LNPA activities and draws attention to the industry's portability deadline, November 2002. A soft copy of the letter will be provided to USTA, CTIA, PCIA and OPASTCO for distribution to their client members. This is to be accomplished and results reported at the May NANC meeting.

LNPA WG will report in July on its "Slow Horse" conclusions.

IMG on LNP Implementation Issues. Recommendation for LNP Problems -- Identification and Management Report was accepted by the NANC. The report will be provided to the LNPA Working Group who will report the next steps at the May NANC meeting.

The "9/9/99" potential LNP issue in the Y2K context will be evaluated.

2. Numbering Resource Optimization Working Group. The NRO will address the COCUS issue exclusively until the June NANC meeting. At the May 25-26th NANC meeting; NRO will report on their review of the three alternatives (Lockheed Martin's LINUS; AT&T's, and US West's models) and advise where NRO is on the issues. NRO may identify another alternative, combining components of the three primary suggestions, but a price index comparison (see following) is not expected on any such alternative by the May NANC meeting.

Chairman Hasselwander will send electronic copies of the all three alternatives to NANC members. Any policy issues should be addressed by the NANC.

With respect to cost of data collection tool -- NRO will ask NANPA for base cost on what is now being done (COCUS) as index =1. Cost comparison is to be done as index values relative to the current COCUS process. Do not ask for 1000 block comparison at this time. Make best effort for a complete report to be provided at the June NANC meeting.

Chairman Hasselwander will memorialize these items and tasks in a memorandum to NRO WG co-chairs. The memo will be available to NANC members for comment before final

transmission to NRO.

3. NANPA Oversight Working Group. NANC unanimously approved the NANPA Annual Performance Evaluation report and recommendation as written by the NANPA Oversight Working Group. NANC approved the "Recommended Next Steps" -- NANC will submit the report to the FCC and notify NANPA; NANPA will develop an action plan and timeline, in cooperation with the Working Group, to address the recommendations and NANPA's suggestions for improvement (*e.g.*, Appendix G, response to question 12); NANPA will present its plan at the June NANC meeting, and the Working Group will monitor NANPA corrective actions.
4. INC Report on 500/900 Portability. Provide a statement on the 500/900 Portability Issue for submission to the Chief, Common Carrier Bureau. The statement will be drafted by Peter Guggina, Paul Hart and Dan Hochvert and circulated electronically to NANC members for consideration before the May NANC.
5. Cost Recovery Working Group. Approval of CR WG letter to Illinois Commission. IMG will focus on some of the cost issues that have been raised by Ameritech, the Illinois Number Pooling Subcommittee and the Steering Group.
6. Lockheed Martin-CIS NANP Exhaust Study. NANC will forward study without comment to the Chief, Common Carrier Bureau, as well as a copy (once finalized) of the Report of the NANP Exhaust Review Team, also without comment.

NANC will address future collaboration with NANPA on exhaust at the May meeting.

NANC requested the NANPA to make periodic reports, starting in May, on projection for exhaust and provide information on Central Office Code (CO Code) and numbering usage and assignment trends based on current assignment activity.

7. Steering Group. Report by Ad Hoc 1K Pooling IMG -- will continue to address sole source vs. competitive bid issue. Chairman Hasselwander will send letter to LLCs, including Canada, to join in these considerations with LLC consideration of implications. Will continue pursuing cost issues.

March 23, SG Conference Call addressed scheduling conflicts and the priority of work assigned by NANC. As a result, a master calendar will be developed by Beth O'Donnell. The master calendar with meeting dates will be posted on Chairman Hasselwander's web site. NANC will try not to create new groups.

April 7<sup>th</sup> letter from Ron Connors, regarding change in central office code administration guidelines regarding audit of code assignees and the administrator. Chairman Hasselwander will discuss with LM-CIS at "highest level" and will report out results at the May NANC meeting.

8. Consumer Preference. NANC members will review consumer preference information provided by Erin Duffy. NANC will address value of collection of information and going

forward steps at a future meeting.

9. State Petitions. In light of the numerous filing of state petitions for additional authority in areas of numbering exhaust, relief planning and allocation of the numbering resource, Paul Hart will bring back with more specificity, written suggestions to the Steering Group regarding conservation and ways to address and assist state commissions in use of the numbering resource.
10. Number Portability N-1 Structure. Peter Guggina will provide an informational report at the May NANC meeting, regarding an initiative by Committee T1S1, proposing reexamination of the number portability N-1 structure.